Recommendations in Response to the OFA Request for Input on the Addition of Mining as a New Sector of Infrastructure under FAST-41

February 2, 2018

Executive Summary

This document provides recommendations from Regions 5, 8, 9, and 10 to OFA in response to the proposal to include mining as a new sector of infrastructure under FAST-41:

- We recommend that an outreach effort including additional stakeholders and further analysis
 be considered to improve the FPISC's understanding of the reasons driving the potential for
 longer NEPA and permitting timeframes for some mining projects in order to determine the
 extent to which the inclusion of mining under FAST-41 would address the reasons for delays. A
 key source of information is a report produced by the GAO in 2016 that specifically looked at the
 causes for delays in mine plan approvals and the NEPA process for mines on federal land;
- We could support including salable minerals (sand, gravel, dirt, rock) as a new sector under FAST-41 since these minerals may be source material for infrastructure projects and these projects do not typically exhibit the technical complexities of metal mining projects;
- We do not recommend including locatable and leasable minerals under FAST-41 since the characteristics of many of these projects are very different from infrastructure projects and are more technically complicated, such that a 2-year NEPA and permitting timeframe is not feasible;
 - o If locatable and leasable minerals are included under FAST-41, we recommend that the timelines be adjusted or exceptions allowed for large or complex mine projects; and,
- While FAST-41 may improve agency coordination, in our experience (and per the findings of the 2016 GAO Report) there are other significant issues that cause delays, such as inadequate mine plans and inadequate agency resources/expertise. Regardless of the decision to include mining under FAST-41, we recommend that EPA and other federal agencies take some actions to address the issues identified in the 2016 GAO Report to improve efficiency, better use of existing resources, and consistency in our work on mining projects.

More of the details pertaining to our collective recommendations are included below.

Background

The Acting Executive Director of the Federal Permitting Improvement Steering Council (FPISC) has recently requested input from Council members, including the EPA, on whether mining should be added as a new sector of infrastructure under FAST-41. This is in response to requests from the Pebble Limited Partnership (July 28, 2017 letter from Tom Collier, Pebble Limited Partnership, to Janet Pfleeger, FPISC) and National Mining Association (September 8, 2017 letter from Katie Sweeney, NMA, to Alexander Hergott, CEQ) to include mining under FAST-41.

The request for the addition of mining is described in a January 16, 2018 memo from the Chair of the Council to Council members, which includes 23 attachments that provide background and information

from the Council's outreach. The Chair is seeking a response from the Council members by February 13, 2018.

OFA has requested that any recommendations be provided by February 7, 2018 regarding:

- Do we need any additional information?
- Do we have any comments or concerns to formally raise in advance of a FPISC vote; and,
- Do we have any reason to offer Byron as to why he should consider voting against the addition of this new sector, or a proposed subset?

Regions 5, 8, 9, and 10 have coordinated in providing a response to each of these questions, below. Most of the hardrock mining activities in the United States are located in the states supported by these Regions.

Recommendations

1. Do we need any additional information?

Yes. Additional information is needed to: (1) represent a variety of viewpoints regarding the addition of the mining sector, per the Council's Standard Operating Procedure; and (2) better understand why mining environmental review and permitting is a lengthy process in order to determine whether including mining under FAST-41 would fix the problem. The basis for these recommendations are provided below.

We Recommend Conducting Additional Outreach

- The Council Standard Operating Procedure (SOP) to Evaluate Whether to Approve the Addition of a New Sector of Infrastructure under FAST-41 states that additional information may be requested including outreach to relevant stakeholders representing a wide variety of viewpoints. The Council has conducted outreach, and based on our review of the attachments to the Council Chair's January 16 memo, it appears that the outreach has been focused mainly on gaining input from mining industry companies and associations.
- Per the Council SOPs, we recommend that broader outreach occur prior to making any decision, in order to represent a variety of viewpoints relevant to the addition of the mining sector under FAST-41. Other stakeholders that could be consulted include: State environmental agencies, tribal governments, and third-party consulting firms that regularly develop mining EISs, and select environmental organizations that regularly provide input on mining EISs and permits. The EPA's Regional Offices can assist with this outreach or provide contact information as needed.

We Recommend Conducting Additional Analysis of Mining Sector NEPA/Permitting Timelines

• The Council's memo cites a 7- to 10-year average permitting timeline for mining projects. We know that while some large controversial mining projects do take that long to permit (e.g., The North Met Project in Minnesota, Montanore Project in Montana, Idaho Cobalt Project in Idaho, Kensington Project in Alaska, Rosemont Project in Arizona), many do not take that long (e.g., Red Dog Extension Project in Alaska, Blackfoot Bridge Mine in Idaho, Haile Gold Mine in South Carolina, Long Canyon Mine in Nevada). There are numerous reasons why the EIS/permitting

process for some mining projects is lengthy, and we propose that it is important to understand the full suite of these reasons in order to determine whether including mining under FAST-41 would reduce timelines while still ensuring compliance with NEPA and permit processing requirements.

- We further recommend that some sources of information to consult when conducting an analysis of mining EIS/permitting timeline analysis include:
 - The 2016 GAO Report Hardrock Mining: BLM and Forest Service Have Taken Some Actions to Expedite the Mine Plan Review Process but Could Do More (GAO-16-165). This report represents surveys of BLM and US Forest Service officials that are involved in Mine Plan of Operation review/approval and NEPA analysis. Based on this report the most frequently cited reasons for delays are: (1) quality of mine plans; (2) limited allocation of BLM/USFS resources and expertise; (3) changing mine plans; (4) mine site complexity; (5) quality of third-party contractors work; (6) legal issues that resulted in more extensive NEPA analysis; and (7) limited or ineffective interagency collaboration.
 - Additional information could also be obtained from case studies of a selection of recent mining projects, surveys of EPA regions experience, and the additional outreach recommended above.

Based on the EPA's experience, we generally agree with the reasons for delays cited in the 2016 GAO Report. Although the GAO report is applicable to mining projects on federal land, we have found that these same reasons for EIS/permitting delays also apply to projects on non-federal land. Including the mining sector as infrastructure under FAST-41, with the focus on early and often interagency collaboration, could remedy one of the reasons cited for delay. However, FAST-41 does not appear to be a solution to the most frequently cited reasons for delay inadequate/incomplete mine plans and limited agency resources/expertise.

2. Do we have any comments or concerns to formally raise in advance of a FPISC vote?

Yes. As discussed above, we think that more information is needed in order for the Council to be fully informed before voting on the addition of mining to FAST-41. In addition, it is important for the Council to understand the scale of some mine projects (including the Pebble Mine Project; the initial requester) and the complexity of many mining projects.

Scale of Projects

• Some aspects of mining sites may fit under the definition of infrastructure. For example, the Pebble Mine Project in Alaska includes roads, a power generating facility and natural gas pipeline, ferry and marine vessel transport, and a port site. Mines outside of Alaska also often have a transportation component and power component. The combination of multiple infrastructure project components and a large mine site into one overall project is more technically and administratively complex than typical infrastructure projects. For example, there may be a range of reasonable alternatives developed for each component (mine, transportation, power) under one EIS. Environmental analysis of the proposed action and alternatives for each component requires administrative efficiency and takes time.

Technical Complexity of Mine Projects

- In contrast to traditional infrastructure projects, mining projects are unique in that they involve the movement and disposal of very large amounts of material (waste rock and tailings) that are exposed to the environment over long periods of time. Open pit and underground mines can fill with water at closure. Waste rock, tailings, and underground and open pit mine walls have natural mineralization that can be acid-generating and/or metal leaching or have radiological characteristics. Some of these projects require maintenance of physical stability and water management into perpetuity. Predicting the environmental impacts associated with disposal of hundreds of millions of tons of tailings and waste rock on the land and the in-filling of mined out open pits and underground mines with mine-exposed waters is challenging. These predictions involve the integration of engineering, baseline geochemical and hydrogeological characterization, and environmental modeling to predict impacts tens to hundreds of years in the future. These complexities can add to EIS preparation and review time, and this time is warranted since the consequences of inadequate characterization can result in groundwater and surface water impacts that extend well beyond the mine footprint;
- The physical stability of tailings dams is an issue unique to mining projects. Tailings dams are generally built to different standards as compared to water-retaining dams. Because the characteristics of tailings and dam locations are site-specific and tailings dams can be built via a variety of techniques, the analysis of stability in EISs is complicated and takes time. Recent tailings dam failures at modern mines in Canada and Brazil have resulted in evolving EIS methodologies for tailings dams. These complexities can add to EIS preparation and review time, and this time is warranted, as the environmental and human consequences of inadequate characterization and evaluation can be extreme; and,
- The assessment of potential impacts associated with mining projects is technically complex and
 therefore it takes more time than typical infrastructure projects due to these unique
 characteristics. We have concerns that imposing a two-year timeframe on the environmental
 analysis and permitting of these projects may not be realistic, given these challenges, as well as
 the environmental consequences of inadequate impact assessment.

3. Do we have any reason to offer Byron as to why he should consider voting against the addition of this new sector, or a proposed subset?

Yes. While we could support including salable minerals as a new sector under infrastructure, we would be concerned with the inclusion of other categories.

Salable Minerals

• We could support a vote for including salable minerals (sand, gravel, dirt, rock) as a new sector under FAST-41. These minerals are more directly linked to infrastructure projects in terms of providing source materials. Sand, gravel, and rock quarry mines do not generally exhibit the waste materials and mineralogical characteristics that are technically challenging at hardrock and coal mines. In addition, the processing of salable materials does not generally involve the addition of processing reagents (e.g., cyanide, acid, etc.) that occur with metal mining ore processing.

Locatable and Leasable Minerals

- We recommend voting against including locatable and leasable mining under FAST-41 since: (1) as described under question 2, above, the characteristics of many of these projects are very different from traditional infrastructure projects and much more technically complicated; and (2) as described under 1, above, the main reasons for the long NEPA/permitting time frames for mining projects is not primarily due to interagency collaboration challenges;
- If a decision is made to include mining under FAST-41, then we recommend that the timelines
 be adjusted, or that exceptions be allowed for large complex mining projects and multicomponent mining projects. We recognize that the potential for improved interagency
 collaboration would be a benefit of FAST-41, and as noted above, we are most concerned that
 the 2-year NEPA/permitting timeframe associated with some FAST-41 infrastructure projects is
 not feasible for mining projects; and,
- We also recommend that federal agencies could implement additional actions to successfully address the other reasons given in the 2016 GAO report for the long mine NEPA/permitting timelines.

Other Actions for Improving Mining Sector NEPA/Permitting

We recommend that federal agencies collectively examine the NEPA/permitting timelines for mining projects and the known causes of delays, to tailor solutions addressing these issues for the mining sector. This recommendation applies regardless of the decision on FAST-41. Here are a few examples of steps that have been taken and can be expanded upon to improve efficiencies addressing the most frequent reasons for delay. We would be happy to discuss these and other ideas further.

Issue	Steps federal agencies have taken to	Additional steps that could be taken
	address the issue	
Inadequate mine plans	EPA	Federal agencies could develop standard
and/or baseline data	In 2003, EPA Region 10 issued EPA	guidance that describes what is needed
	and Hardrock Mining: A Sourcebook	in mine plans and environmental
The 2016 GAO report	for Industry in the Northwest and	baseline to start the NEPA process. This
cites incomplete/	Alaska which provides information	provides consistency and level playing
inadequate mines plans	on what is needs to start the NEPA	field across the country. It could be an
as the number one	and Clean Water Act permitting	update and nationalization of the Region
reason for NEPA/Mine	process for mining projects in Region	10 Source Book, nationalization of BLM-
Plan approval delays on	10. The US Forest Service references	NV's guidance documents, or a new
federal land. The mining	the Region 10 Sourcebook it its	document.
industry response to this	national guidance on mine plan of	
reason is that the	operations and baseline data	
agencies are not	requirements.	
consistent in		
communicating what is	BLM-NV	
required for a complete	The Nevada BLM has developed	
mine plan and that the	several guidance documents	
requirements continue to	identifying the information required	

Issue	Steps federal agencies have taken to address the issue	Additional steps that could be taken
evolve and increase due to inexperienced agency personnel and fear of litigation.	in mining Plans of Operation to front- load the NEPA process. The Nevada BLM has an MOU with the Nevada Division of Environmental Protection and the US Forest Service to improve coordination and expedite administration and enforcement of respective authorities for hardrock mining in the state. The Nevada BLM also has an MOU with EPA Region 9 for early coordination on EISs for hardrock mining projects.	
Inadequate agency resources and expertise The 2016 GAO report cites inadequate agency resources and expertise as the second reason for NEPA/mine plan approval delays. The mining industry tends to agree that this is an issue that can result in delays and inconsistency.	BLM & USFS The BLM and the USFS can enter into reimbursable services agreements with Project Applicants to fund extra resources and expertise for specific projects. EPA The EPA's resources have been decreasing over time. The EPA maintains expertise and consistency through regional coordination, as Regions 5, 8, 9, and 10 each have mining sector teams, and through the EPA's National Mining Team.	Additional staff and travel resources to visit mine project sites would enhance the EPA's engagement during the NEPA and permitting process. The EPA could also create a cadre of mining experts that could lend resources to projects in need, regardless of geographic location. The BLM and USFS currently have national experts utilized on major mining projects across the country. The EPA could develop a similar approach, which could enhance resources and national consistency.
Agency Collaboration and Consistency The 2016 GAO report identified agency collaboration as an issue. Project proponents frequently cite agency collaboration and inconsistencies across projects as issues of concern.	Through NEPA MOUs and agreements, federal agencies create frameworks for collaboration and create project-specific teams to clarify roles and provide structure for EIS development. Federal agencies currently work closely with state agencies, particularly in states that have codified coordinated permitting and review processes, such as Alaska, Idaho, and Minnesota. The EPA's regional and national mining teams were developed, in part, to improve EPA's collaboration and consistency.	Template NEPA/permitting MOUs or national or statewide MOUs between agencies could save time and promote consistency, similar to the Nevada statewide MOU between BLM and EPA Region 9. In addition, EPA could regularly engage with other Federal agencies on mining issues at a national level under the Federal Mining Dialogue (FMD). The EPA currently meets with other federal agencies, including BLM and USFS, under the FMD, but the current focus of the FMD is on mine site cleanup issues. The FMD evolved from the National Interagency Coordinating Committee (NICC) on Mining that was established

Issue	Steps federal agencies have taken to address the issue	Additional steps that could be taken
		under EPA's 1997 National Hardrock Mining Framework. The purpose of the NICC was to serve as forum for development of consensus federal approaches to critical technical and policy issues at mining sites. The NICC could be reestablished, or the FMD could be expanded, to meet the original goals of the NICC and include a subgroup that focuses on mining- specific NEPA and permitting technical and administrative issues. This group could resolve overarching issues that crop up on many mining EISs at a national level, rather than dealing with these on a project-by-project basis.